APPLICATION PROGRAMMING INTERFACE ENABLING APPLICATION PROGRAMS TO GROUP CODE AND DATA TO CONTROL ALLOCATION OF PHYSICAL MEMORY IN A VIRTUAL MEMORY SYSTEM

5   **ABSTRACT OF THE DISCLOSURE**

An application programming interface (API) enables application programs in a multitasking operating environment to classify portions of their code and data in a group that the operating system loads into physical memory all at one time. Designed

10 for operating systems that implement virtual memory, this API enables memory-intensive application programs to avoid performance degradation due to swapping of units of memory back and forth between the hard drive and physical memory. Instead of incurring the latency of a page fault whenever the application attempts to access code or data in the group that is not located in physical memory, the API makes sure

15 that all of the code or data in a group is loaded into physical memory at one time. This increases the latency of the initial load operation, but reduces performance degradation for subsequent memory accesses to code or data in the group.